AMENDMENTS TO THE CLAIMS

The listing of claims below replaces all prior versions of claims in the application.

1. (Currently Amended) Ink comprising:

~~a primary particle of a copolymer~~ primary particles of a copolymer that has a glass transition point less than or equal to 65°C, a softening point measured by a flow tester ranging from 40 through 150°C and a volume average particle diameter ranging from 0.05 through 1 μm obtained from a radical polymeric monomer composition consisting essentially of:

(a) 20 through 99 wt% of styrene;

(b) 10 through 80 wt% alkyl acrylate or alkyl metacrylate, wherein said alkyl acrylate or alkyl methacrylate is at least one selected from the group consisting of butyl acrylate, 2-ethylhexyl acrylate and lauryl methacrylate; and

(c) 5 through 10 wt% of the polymeric monomer including a polar group selected from the group consisting of 2-hydroxypropyl-N, N, N-trimethylammonium chloride acrylate, and N, N-diallylmethylammonium chloride;

a colorant, and

a solvent that is liquid at room temperature;

wherein said colorant is

dissolved or dispersed in said copolymer particles or

dispersed in said solvent with said copolymer particles by adsorption on or coating a surface of said copolymer particles,

but said colorant is not dissolved in said solvent; and

wherein the primary ~~particle~~ particles of the copolymer ~~is prepared~~ are prepared by a polymerization process selected from the group consisting of an emulsion polymerization, a micro emulsion polymerization and a soap-free polymerization.

2-3. (Canceled)

4. (Previously Presented) The ink according to claim 1, wherein said copolymer has a glass transition point ranging from -30 through 65°C.

5. (Canceled)

6. (Original) The ink according to claim 1, wherein said colorant comprises one selected from the group consisting of a pigment and a dye, and said colorant is dissolved or dispersed in said primary particle of a copolymer.

7. (Previously Presented) The ink according to claim 1, wherein said colorant comprises one selected from the group consisting of a pigment and a dye.

8. (Canceled)

9. (Original) The ink according to claim 1, wherein said copolymer is included at 1 through 50 wt%.

10. (Original) The ink according to claim 1, wherein said colorant is included at 0.1 through 20 wt%.

11-13. (Canceled)

14. (Currently Amended) Ink comprising:

~~a copolymer particle~~ primary particles of a copolymer that has a glass transition point less than or equal to 65°C, a softening point measured by a flow tester ranging from 40 through 150°C and a volume average particle diameter ranging from 0.05 through 1 μm obtained from a radical polymeric monomer composition consisting essentially of:

(a) 20 through 99 wt% of styrene;

(b) 10 through 80 wt% alkyl acrylate or alkyl metacrylate, wherein said alkyl acrylate or alkyl methacrylate is at least one selected from the group consisting of butyl acrylate, 2-ethylhexyl acrylate and lauryl methacrylate; and

(c) 5 through 10 wt% of the polymeric monomer including a polar group selected from the group consisting of 2-hydroxypropyl-N, N, N-

trimethylammonium chloride acrylate, and N, N-diallylmethylammonium chloride;

a colorant; and

a solvent that is liquid at room temperature;

wherein said colorant is dissolved or dispersed in said copolymer particles or dispersed in said solvent with said copolymer particles by adsorption on or coating a surface of said copolymer particles, but said colorant is not dissolved in said solvent; and

wherein the primary ~~particle~~ particles of the copolymer ~~is prepared~~ are prepared by a polymerization process selected from the group consisting of an emulsion polymerization, a micro emulsion polymerization and a soap-free polymerization.

15. (Original) The ink according to claim 14, further comprising a surfactant covering a surface of said copolymer particle.

16. (Currently Amended) An ink cartridge including a case and ink which is stored in said case and comprises:

supplying ink to said head, wherein said ink comprises:

~~a copolymer particle~~ primary particles of a copolymer that has a glass transition point less than or equal to 65°C, a softening point measured by a flow tester ranging from 40 through 150°C and a volume average particle diameter ranging from 0.05 through 1 μm obtained from a radical polymeric monomer composition consisting essentially of:

(a) 20 through 99 wt% of styrene; and

(b) 10 through 80 wt% of alkyl acrylate or alkyl metacrylate, wherein said alkyl acrylate or alkyl methacrylate is at least one selected from the group consisting of butyl acrylate, 2-ethylhexyl acrylate and lauryl methacrylate; and

(c) 5 through 10 wt% of the polymeric monomer including a polar group selected from the group consisting of 2-hydroxypropyl-N, N, N-trimethylammonium chloride acrylate, and N, N-diallylmethylammonium chloride;

a colorant; and

a solvent that is liquid at room temperature;

wherein said colorant is dissolved or dispersed in said copolymer particles or dispersed in said solvent with said copolymer particles by adsorption on or coating a surface of said copolymer particles, but said colorant is not dissolved in said solvent; and

wherein the primary ~~particle~~ particles of the copolymer ~~is prepared~~ are prepared by a polymerization process selected from the group consisting of an emulsion polymerization, a micro emulsion polymerization and a soap-free polymerization.

17. (Currently Amended) A recording device including a head and an ink cartridge supplying ink to said head, wherein said ink comprises:

~~a copolymer particle~~ primary particles of a copolymer that has a glass transition point less than or equal to 65°C, a softening point measured by a flow tester ranging from 40 through

150°C and a volume average particle diameter ranging from 0.05 through 1 μm obtained from a radical polymeric monomer composition consisting essentially of:

(a) 20 through 99 wt% of styrene;

(b) 10 through 80 wt% of alkyl acrylate or alkyl metacrylate, wherein said alkyl acrylate or alkyl methacrylate is at least one selected from the group consisting of butyl acrylate, 2-ethylhexyl acrylate and lauryl methacrylate; and

(c) 5 through 10 wt% of the polymeric monomer including a polar group selected from the group consisting of 2-hydroxypropyl-N, N, N-trimethylammonium chloride acrylate, and N, N-diallylmethylammonium chloride;

a colorant; and

a solvent that is liquid at room temperature;

wherein said colorant is dissolved or dispersed in said copolymer particles or dispersed in said solvent with said copolymer particles by adsorption on or coating a surface of said copolymer particles, but said colorant is not dissolved in said solvent; and

wherein the primary ~~particle~~ particles of the copolymer ~~is prepared~~ are prepared by a polymerization process selected from the group consisting of an emulsion polymerization, a micro emulsion polymerization and a soap-free polymerization.

18-19. (Canceled)

20. (Currently Amended) Ink comprising:

~~a primary particle of a copolymer~~ primary particles of a copolymer that has a glass transition point -30 through 65°C, a softening point measured by a flow tester ranging from 40 through 150°C and a volume average particle diameter ranging from 0.05 through 1 μm obtained from a radical polymeric monomer composition consisting essentially of:

(a) 20 through 99 wt% of styrene;

(b) 10 through 80 wt% of alkyl acrylate, or alkyl methacrylate, wherein said alkyl acrylate or alkyl methacrylate is at least one selected from the group consisting of butyl acrylate, 2-ethylhexyl acrylate and lauryl methacrylate; and

(c) 5 through 10 wt% of the polymeric monomer including a polar group selected from the group consisting of 2-hydroxypropyl-N, N, N-trimethylammonium chloride acrylate, and N, N-diallylmethylammonium chloride;

a colorant; and

a solvent that is liquid at room temperature;

wherein said colorant is dissolved or dispersed in said copolymer particles or dispersed in said solvent with said copolymer particles by adsorption on or coating a surface of said copolymer particles, but said colorant is not dissolved in said solvent; and

wherein the primary ~~particle~~ particles of the copolymer ~~is prepared~~ are prepared by a polymerization process selected from the group consisting of an emulsion polymerization, a micro emulsion polymerization and a soap-free polymerization.

21-25. (Canceled)